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| 10/007,198 | 10/19/2001 | Noriko Sugimoto | B422-170 | 3545 |

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| EXAMINER |
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BOYCE, ANDRE D

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| ART UNIT | PAPER NUMBER |
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3623

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03/18/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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| Office Action Summary | Application No. 10/007,198 | Applicant(s) SUGIMOTO, NORIKO | |
| | Examiner Andre Boyce | Art Unit 3623 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 December 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-7 and 11-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2-7 and 11-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. This Final office action is in response to Applicant's amendment filed December 26, 2007. Claims 2-7 and 11-13 have been amended. Claims 2-7 and 11-14 are pending.
2. Applicant's arguments filed December 26, 2007 have been fully considered but they are not persuasive.

Claim Rejections - 35 USC § 103

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
4. Claims 2, 3, 5-7 and 11-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fawcett et al (USPN 5,678,002), in view of in view of Phung et al (US 2002/0007237).

As per claim 2, Fawcett et al disclose analysis means for analyzing information about the trouble in the printer (i.e., PSS 38 commands a remote diagnostic agent 50 on customer's computer 40 to execute a diagnostic application, column 10, lines 28-32); and search means for searching for the operation for resolving the trouble in the printer on the basis of the result of said analysis (i.e., automatically sniff around customer's computer in order to gather diagnostic data and help troubleshoot, column 10, lines 44-47).

As per claim 3, Fawcett et al disclose analysis by said analysis means is performed on the side of a user using the printer (i.e., PSS 38 commands a remote diagnostic agent 50 on customer's computer 40 to execute a diagnostic application, column 10, lines 28-32).

As per claim 5, Fawcett et al does not disclose management means for managing a guarantee period of the printer, wherein said cost depends on the managed guarantee period. Phung et al discloses the product manufacturer absorbing all the costs related to troubleshooting and resolving failures covered by a warranty (§ 0005). Both Fawcett and Phung are concerned with conducting product diagnosis over an electronic network, therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to include managing a guarantee period of the product (i.e., warranty), wherein said cost depends on the warranty in Fawcett, as seen in Phung, thereby determining when the customer does not have to incur diagnostic and troubleshooting costs, as seen in Phung. As a result, the customer service in Fawcett et al is improved, since the cost to the customer may be reduced.

As per claim 6, Fawcett et al disclose management means for managing information about specifications of the printer (i.e., device manager diagnostic allows PSS engineer to retrieve the properties and characteristics of all hardware devices attached to computer, column 12, lines 48-50), wherein analysis by said analysis means depends on the managed information about

the specifications (i.e., query a list of available devices and invoke device diagnostics, column 10, lines 35-36).

As per claim 7, Fawcett et al disclose storage means for storing contents of the operation actually performed to resolve the trouble in the printer or results of the operation (i.e., the diagnostic interpreter remains in memory on the PSS side, column 11, lines 20-23 and 28-31).

As per claim 11, Fawcett et al disclose a trouble management system (i.e., product support center, including product support services (PSS) client/server messaging system, column 3, lines 60-62), comprising: first receiving means for receiving, through a network (i.e., common network protocol for passing data, column 4, lines 3-5), from a customer apparatus connected to a printer, trouble information of a trouble occurring in the printer (i.e., communications path established between the customer and the PSS, column 6, lines 4-9, wherein a remote diagnostic agent 50 on customer computer 40 can execute a resident diagnostic application and query, receive and update information about an attached printer, column 10, lines 28-32); determining means for determining whether or not an inquiry is necessary, based on the contents of the trouble information received by said first receiving means (i.e., customer is asked a series of questions and product support center computer asks the customer's computer to transmit certain background/diagnostic information that may be relevant to the problem, column 1, lines 50-59); first transmitting means for transmitting the inquiry item relating to the printer, which inquiry item is

based on the trouble information received by said first receiving means to said customer apparatus (i.e., PSS 38 can command remote diagnostic agent to query, receive and update information about the printer, column 10, lines 35-38 and in response to a signal PSS computer automatically interrogates the customer computer to obtain relevant printer information, column 15, lines 20-30), if said determining means determines that the inquiry is necessary (i.e., after review the product support engineer can query the customer's computer/printer for additional information, column 2, lines 3-5); diagnosing means for diagnosing the trouble occurring in the printer, in accordance with the response received by said second receiving means (i.e., diagnostic application, column 10, lines 28-30), second transmitting means for selectively transmitting a message indicating how to deal with the trouble (i.e., the diagnostic interpreter interprets the data and displays the results for the PSS engineer, column 9, lines 27-30) and a request of repair of the printer respectively to said customer apparatus (i.e., in response to a signal PSS computer automatically interrogates the customer computer to obtain relevant printer information, column 15, lines 20-30) and a person in charge of the repair (i.e., PSS engineer, column 15, lines 14-16) in accordance with a result of the diagnosis by said diagnosing mean.

Fawcett et al does not explicitly disclose second receiving means for receiving, from said customer apparatus, a response which is input to said

customer apparatus on the basis of the inquiry item transmitted by said first transmitting means.

Phung et al disclose data collection 50 in order to determine diagnostic data from system 400 (¶ 0052), and a call routine invoked to get diagnostic data from the vehicle system (i.e., receiving, from said customer apparatus, a response, ¶ 0052). Both Fawcett and Phung are concerned with conducting product diagnosis over an electronic network. Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to include receiving, from said customer apparatus, a check result which is input to said customer apparatus on the basis of the check item transmitted in Fawcett et al, as seen in Phung et al, thus efficiently determining the cause and solution of a encountered problem, thereby making Fawcett et al more robust.

Claim 12 is rejected based upon the same rationale as the rejection of claim 11, since it is the method claim corresponding to the system claim.

Claim 13 is rejected based upon the same rationale as the rejection of claim 11, since it is the storage medium claim corresponding to the system claim.

As per claim 14, Fawcett et al disclose diagnosis possibility determining means for determining whether or not a diagnosis is possible (i.e., execution of resident or downloaded diagnostic application, wherein the results indicate that no trouble exists, column 10, lines 30-32, wherein diagnostic actions completed on the customer's computer are documented in a transaction log, column 11, lines 20-23);

additional determination means for determining whether or not a further inquiry is necessary, if the diagnosis possibility determining means determines that the diagnosis is not possible (i.e., execution of resident or downloaded diagnostic application, wherein the results indicate that no trouble exists, column 10, lines 30-32, wherein diagnostic actions completed on the customer's computer are documented in a transaction log, column 11, lines 20-23); and additional transmission means for transmitting a further inquiry item to the customer apparatus, if the additional determination means determines that the further inquiry is necessary (i.e., the diagnostic interpreter's callback function parses the message, interprets the data and displays the result of the PSS engineer, column 9, lines 27-30, including the knowledge base diagnostic, column 14, lines 58-67).

5. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fawcett et al (USPN 5,678,002), in view of Phung et al (US 2002/0007237), in further view of Skaaning et al (USPN 6,535,865).

As per claim 4, neither Fawcett et al nor Phung et al explicitly disclose said notice means sends for sending, to said customer apparatus, a notice of a cost or a time required for the operation. Skaaning et al disclose estimating the cost of actions as a combination of multiple factors, including time to perform the action (column 21, lines 1-5). Both Fawcett and Skaaning are concerned with effective troubleshooting via a customer computer, therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to include sending notice

of a cost in Fawcett, as seen in Skaaning, in order to determine which is the optimal step to perform (see Skaaning, column 21, lines 1-3), thus improving the efficiency in Fawcett.

Response to Arguments

6. In the Remarks, Applicant argues that neither Fawcett et al nor Phung et al teach or suggest first receiving means for receiving, through a network, from a customer apparatus connected to a printer, trouble information of a trouble occurring in the printer, since in Fawcett et al the first information is from the customer, not from the customer apparatus connected to a printer. In addition, Applicant goes on to argue that neither Fawcett et al nor Phung et al can teach or suggest (based upon Applicant's initial argument) first transmitting means for transmitting the inquiry item relating to the printer, which inquiry item is based on the trouble information received by said first receiving means to said customer apparatus.

The Examiner respectfully disagrees. First, contrary to Applicant's assertion, the Examiner notes that information coming from the customer first in no way precludes Fawcett et al from teaching Applicant's claimed language. In other words, the claim language simple recites a first and second receiving means, not where the first information is coming from. As such, Applicant seems to be reading limitations into the claim language there are not present. Moreover, Fawcett et al disclose communications path established between the customer and the PSS, column 6, lines 4-9, wherein a remote diagnostic agent 50 on customer computer 40 can

execute a resident diagnostic application and query, receive and update information about an attached printer, column 10, lines 28-32 and in response to a signal PSS computer automatically interrogates the customer computer to obtain relevant printer information based upon the customer's responses and the printer properties diagnostic, column 15, lines 20-30. As such, Fawcett et al indeed discloses first receiving means for receiving, through a network, from a customer apparatus connected to a printer, trouble information of a trouble occurring in the printer and a first transmitting means for transmitting the inquiry item relating to the printer, which inquiry item is based on the trouble information received by said first receiving means to said customer apparatus, as seen in the above rejection.

In addition, Applicant argues that neither Fawcett et al nor Phung et al teach or suggest second transmitting means for selectively transmitting a message indicating how to deal with the trouble and a request of repair of the printer respectively to said customer apparatus and a person in charge of the repair in accordance with a result of the diagnosis by said diagnosing mean. The Examiner respectfully disagrees and submits that Fawcett et al disclose second transmitting means for selectively transmitting a message indicating how to deal with the trouble (i.e., the diagnostic interpreter interprets the data and displays the results for the PSS engineer, column 9, lines 27-30) and a request of repair of the printer respectively to said customer apparatus (i.e., in response to a signal PSS computer automatically interrogates the customer computer to obtain relevant printer information, column 15, lines 20-30)

and a person in charge of the repair (i.e., PSS engineer, column 15, lines 14-16) in accordance with a result of the diagnosis by said diagnosing mean.

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andre Boyce whose telephone number is (571)272-6726. The examiner can normally be reached on 9:30-6pm M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tariq Hafiz can be reached on (571) 272-6729. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3623

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Andre Boyce/
Patent Examiner, Art Unit 3623
March 10, 2008